

Claims

What is claimed is:

1. A method for improving lung surfactant production in an individual with impaired surfactant production, the method comprising administering a leptin compound to the individual
5 for a time and in an amount sufficient to enhance surfactant production.

2. The method of Claim 1, wherein the individual is a mammal.

3. The method of Claim 1, wherein the individual is an infant with an in utero
10 development of less than nine months.

4. The method of Claim 1, wherein the leptin compound comprises at least a
biologically active fragment of leptin.

5. The method of Claim 1, wherein the leptin compound is a recombinant protein
15 comprising at least a biologically active fragment of leptin.

6. The method of Claim 1, wherein the leptin compound is administered in a dosage
from about 0.1 ng/kg body weight to about 100 mg/kg body weight.

7. The method of Claim 1, wherein the leptin compound is administered by a
method selected from the group consisting of subcutaneously, intradermally, intravenously,
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intramuscularly, intraperitoneally, ~~transdermally~~, orally, enteral tube feeding, pulmonary delivery, intranasal delivery, controlled release delivery and pump delivery.

8. The method of claim 1 wherein the step of administering the leptin compound
5 includes administering to the individual milk fat globules containing leptin.

9. A method for improving lung surfactant production in an individual with respiratory distress syndrome, the method comprising administering a leptin compound to the individual for a time and in an amount sufficient to enhance surfactant production.

10. The method of Claim 9, wherein the leptin compound comprises at least biologically active fragment of leptin.

11. The method of Claim 9, wherein the leptin compound is administered in a dosage
15 from about 0.1 ng/kg body weight to about 100 mg/kg body weight.

12. The method of Claim 9, wherein the leptin compound is administered by a method selected from the group consisting of subcutaneously, intradermally, intravenously, intramuscularly, intraperitoneally, ~~transdermally~~, orally, enteral tube feeding, pulmonary
20 delivery, intranasal delivery, controlled release delivery, and pump delivery.

13. The method of claim 9 wherein the step of administering the leptin compound includes administering to the individual milk fat globules containing leptin.

14. A method for improving lung surfactant production in an individual with
5 Bronchopulmonary Dysplasia, the method comprising administering a leptin compound to the individual for a time and in an amount sufficient to enhance surfactant production.

15. The method of Claim 14, wherein the leptin compound comprises at least a biologically active fragment of leptin.

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16. The method of claim 14 wherein the step of administering the leptin compound includes administering to the individual milk fat globules containing leptin.